

[NON-VOLATILE MEMORY AND FABRICATING METHOD THEREOF]

Abstract

A method of fabricating a non-volatile memory is provided. A longitudinal strip of stacked layer is formed over a substrate. The longitudinal strip is a stacked layer comprising a gate dielectric layer, a conductive layer and a cap layer. A buried bit line is formed in the substrate on each side of the longitudinal strip. The longitudinal strip is patterned to form a plurality of stacked blocks. Thereafter, a dielectric layer is formed over the substrate. The dielectric layer exposes the cap layer of the stacked blocks. Some cap layers of the stacked blocks are removed to expose the conductive layer underneath. A word line is formed over the dielectric layer to connect stacked blocks in the same row serially together.